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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,078	09/04/2003	Brian G. Morin	5514B	5850

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Milliken & Company
P.O. Box 1927
Spartanburg, SC 29304

EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/655,078

Applicant(s)

MORIN ET AL.

Examiner

Cheryl Juska

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/04, 12/03.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. The last two claims (on page 29 of the specification as originally filed) have been renumbered as "9" and "10" according to 37 CFR 1.126 to correct the occurrence of two claims numbered "8."
2. Claim 1 is objected to for the lack of units for the measured long period. For the purposes of examination said units are taken to be "nm."

Double Patenting

3. Applicant is advised that should claim 8 be found allowable, claim 9 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,541,554 (Application No. 09/860,005; PG Pub 2003/0027907). Although the conflicting claims are not identical, they are not patentably distinct from each other because tape fibers typically have a denier within the range recited in the patent. Additionally, the recited shrinkage and peak crystallization temperature properties of the patent would be inherent to a polypropylene tape fiber having the presently claimed amount of nucleating agent. Furthermore, it would have been readily obvious to one skilled in the art to employ the fiber of the patent in a woven fabric such as a carpet backing since woven fabric made of polypropylene tape yarns are well known in the art of carpet backing fabrics.

6. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/268,329 (PG Pub 2003/0069341). Although the conflicting claims are not identical, they are not patentably distinct from each other because tape fibers typically have a denier within the range recited in the copending application. Additionally, the recited shrinkage properties of the copending application would be inherent to a polypropylene tape fiber having the presently claimed amount of nucleating agent. Furthermore, it would have been readily obvious to one skilled in the art to employ the fiber of the copending application in a woven fabric such as a carpet backing since woven fabrics made of polypropylene tape yarns are well known in the art of carpet backing fabrics.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1771

7. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,759,124 (Application No. 10/295,463; PG Pub 2004/0096652). Although the conflicting claims are not identical, they are not patentably distinct from each other because tape fibers typically have a denier within the range recited in the patent. Additionally, it would have been obvious to select polypropylene as the polyolefin of the patent. The recited shrinkage and secant modulus properties would be inherent to a polypropylene tape fiber having the presently claimed amount of nucleating agent. Furthermore, it would have been readily obvious to one skilled in the art to employ said fiber in a woven fabric such as a carpet backing.

8. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 11 of copending Application No. 10/295,696 (PG Pub 2004/0096653). Although the conflicting claims are not identical, they are not patentably distinct from each other because tape fibers typically have a denier within the range recited in the copending application. Additionally, it would have been readily obvious to one skilled in the art to employ the fiber of the copending application in a woven fabric such as a carpet backing since woven fabric made of polypropylene tape yarns are well known in the art of carpet backing fabrics.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 8, 11, 13-16, 18, 19-28, 30, 32-37, 29, and 41-48 of copending Application No. 10/422,187 (PG Pub 2003/0216498).

Art Unit: 1771

Although the conflicting claims are not identical, they are not patentably distinct from each other because the properties of heat shrinkage, peak crystallization temperature, and x-ray scattering are inherent to the polypropylene tape yarn containing the nucleator agent in the amount presently claimed. Note tape yarns are commonly found within the denier range recited in 10/422,187. Additionally, it would have been readily obvious to one skilled in the art to employ the fiber or yarn in a woven fabric, such as a carpet backing, since woven fabrics made of polypropylene tape yarns are well known in the art of carpet backing fabrics.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,863,976 (Application No. 10/443,003; PG Pub 2004/0096654). Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one skilled in the art to employ the inventive polypropylene monofilament in a woven fabric, such as a carpet backing, since said woven carpet backings are well known in the art. Additionally, it is argued that the shrinkage and elongation properties recited in the patent would be inherent to the polypropylene tape fiber of the present invention since like materials cannot have mutually exclusive properties.

11. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/449,423 (PG Pub 2004/0096661). Although the conflicting claims are not identical, they are not patentably distinct from each other because the properties of heat

Art Unit: 1771

shrinkage and secant modulus are inherent to the polypropylene tape yarn containing the nucleator agent in the amount presently claimed. Note tape yarns are commonly found within the denier range recited in 10/449,423. Additionally, it would have been readily obvious to one skilled in the art to employ the fabric article as a carpet backing, since woven fabrics made of polypropylene tape yarns are well known in the art of carpet backing fabrics.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 8, 11, 13-16, 18, 19-28, 30, 32-37, 29, and 41-48 of copending Application No. 10/635,261 (PG Pub 2004/0105978). Although the conflicting claims are not identical, they are not patentably distinct from each other because the properties of heat shrinkage, peak crystallization temperature, and x-ray scattering are inherent to the polypropylene tape yarn containing the nucleator agent in the amount presently claimed. Note tape yarns are commonly found within the denier range recited in 10/635,261. Additionally, it would have been readily obvious to one skilled in the art to employ the woven fabric in a carpet backing, since woven fabric made of polypropylene tape yarns are well known in the art of carpet backing fabrics.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 23-25, 36-38, and 44-46 of U.S. Patent No. 6,849,330 (Application No. 10/651,777). Although the conflicting claims are not identical, they

Art Unit: 1771

are not patentably distinct from each other because it would have been readily obvious to one skilled in the art to make a woven fabric, such as a carpet backing, from the polypropylene tape fibers and fabrics of the patent since said woven carpet backings are well known in the art. Additionally, it would have been readily obvious to employ a colorant to said tape fiber.

14. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,794,033 (Application No. 10/655,227; PG Pub 2004/0086713). Although the conflicting claims are not identical, they are not patentably distinct from each other because the properties of shrinkage, secant modulus, and tenacity are inherent to the polypropylene tape fiber containing the nucleator agent in the amount presently claimed. Additionally, it would have been readily obvious to one skilled in the art to employ said tape yarn in a woven fabric, such as a carpet backing, since polypropylene tape yarns are well known in the art of carpet backing fabrics.

15. Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 10/751,395 (PG Pub 2004/0137817). Although the conflicting claims are not identical, they are not patentably distinct from each other because the presently claimed amount of nucleator compound is encompassed by that recited in the copending application. Additionally, the recited shrinkage property of the copending application would be inherent to a polypropylene tape fiber having the presently claimed amount of nucleating agent.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1771

16. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5-23 of U.S. Patent No. 6,878,443 (Application No. 10/899,510; PG Pub 2005/0019565). Although the conflicting claims are not identical, they are not patentably distinct from each other because the properties of x-ray scattering, elongation are inherent to the polypropylene tape yarn containing the nucleator agent in the amount presently claimed. Additionally, it would have been readily obvious to one skilled in the art to employ said tape yarn in a woven fabric, such as a carpet backing, since polypropylene tape yarns are well known in the art of carpet backing fabrics.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

18. Claims 1-10 are rejected under 35 USC 102(e) as being anticipated by US 6,541,554 (Application No. 09/860,005; PG Pub 2003/0027907) issued to Morin et al., US 2003/0069341 (Application No. 10/268,329 which is a continuation of 09/860,005), and US 2003/0216498 (Application No. 10/422,187 which is a continuation of 10/268,329) issued to Morin et al.

Applicant claims a fabric article comprising at least one polypropylene tape fiber having in excess of 2000 ppm and up to 5000 ppm of a nucleator compound. Said fiber exhibits an x-ray scattering long period of at least 20 nm. The nucleator compound is p-MDBS, 3,4-DMDBS,

Art Unit: 1771

2,4,5-TMDBS, DBS, sodium benzoate, NA-11, NA-21, and mixtures thereof. The article is preferably a woven fabric or a carpet backing.

Morin discloses polypropylene fibers having a nucleator agent therein (Morin '554, col. 1, lines 13-24). Said fiber has a long period of at least 20 nm as measured by small angle x-ray scattering (Morin '554, col. 2, lines 28-30). Said fibers may be tape fibers having a denier of at most 5000 (Morin '554, col. 3, lines 30-35). The amount of nucleating agent includes the presently claimed range of 2000-5000 ppm (Morin '554, col. 3, lines 42-51 and col. 4, lines 38-47). Said nucleating agents include those claimed by applicant (Morin '554, col. 4, lines 17-38). The fiber may be used to make a woven fabric and a carpet backing (Morin '554, col. 8, lines 27-30 and col. 1, lines 32-55). Thus, Morin clearly anticipates claims 1-10.

19. Claims 1-10 are rejected under 35 USC 102(e) as being anticipated by US 6,656,404 (Application No. 09/860,130; PG Pub 2002/0190423) issued to Morin et al., US 2004/0105978 (Application No. 10/635,261 which is a continuation of 09/860,130) issued to Morin et al., and US 2004/0007794 (Application No. 10/609,716 which is a continuation of 09/860,130).

Morin discloses polypropylene fibers having a nucleator agent therein (Morin '404, col. 2, lines 21-25). Said fiber has a long period of at least 20 nm as measured by small angle x-ray scattering (Morin '404, col. 2, lines 25-31). Said fibers may be tape fibers having a denier of at most 5000 (Morin '404, col. 3, lines 31-36). The amount of nucleating agent includes the presently claimed range of 2000-5000 ppm (Morin '404, col. 3, lines 43-52 and col. 4, lines 39-48). Said nucleating agents include those claimed by applicant (Morin '404, col. 4, lines 18-39). The fiber may be used to make a woven fabric and a carpet backing (Morin '404, col. 8, lines 28-31 and col. 1, lines 33-56). Thus, Morin clearly anticipates claims 1-10.

Claim Rejections - 35 USC § 102/103

20. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

21. Claims 1-10 are rejected under 35 USC 102(e) as being anticipated by, or in the alternative under 35 USC 103(a) as being obvious over US 2003/0134118 (Application No. 10/036,604) issued to Morin et al. and US 2004/0137817 (Application No. 10/751,395 which is a continuation of 10/036,604) issued to Morin et al.

Morin discloses polypropylene tape fibers having a nucleator agent therein (Morin '118, abstract). The nucleating agent is present in an amount of at least 10 ppm to at most about 2000 ppm (Morin '118, sections [0009] and [0010]). Note this teaching anticipates applicant's claim limitation since an amount of 2001 or even 2010 ppm falls within Morin's teaching of "about 2000 ppm" and within applicant's "in excess of 2000 ppm." Said nucleating agents include those claimed by applicant (Morin '118, section [0015]). The fiber may be used to make a woven carpet backing (Morin '118, sections [0030] and [0032]).

Thus, Morin clearly teaches the limitations of claims 1-10 with the exception of the x-ray scattering long period. However, Morin does teach that the crystallization properties due to the presence of the nucleating agent can be measured by x-ray scattering. Specifically, the x-ray scattering long period is representative of an average crystallization temperature (Morin '118, section [0022]). As such, it is argued that the presently claimed long period is inherent to the Morin invention. Support for said presumption is found in the use of similar materials (i.e., polypropylene tape yarns having a nucleator agent as recited) used to produce the fabric. The burden is upon applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the alternative,

Art Unit: 1771

the claimed long period would obviously have been provided by the process disclosed by Morin.

Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 1-10 are rejected.

22. Claims 1-10 are rejected under 35 USC 102(e) as being anticipated by, or in the alternative under 35 USC 103(a) as being obvious over US 2003/0134082 (Application No. 10/036,834) issued to Morin et al.

Morin '082 discloses polypropylene tape fibers having a nucleator agent therein (Morin '082, abstract). The nucleating agent is present in an amount of at least 10 ppm to at most about 2000 ppm (Morin '082, sections [0009] and [0010]). Note this teaching anticipates applicant's claim limitation since an amount of 2001 or even 2010 ppm falls within Morin's teaching of "about 2000 ppm" and within applicant's "in excess of 2000 ppm." Said nucleating agents include those claimed by applicant (Morin '082, section [0015]). The fiber may be used to make a woven carpet backing (Morin '082, sections [0030] and [0032]).

Thus, Morin '082 clearly teaches the limitations of claims 1-10 with the exception of the x-ray scattering long period. However, Morin '082 does teach that the crystallization properties due to the presence of the nucleating agent can be measured by x-ray scattering. Specifically, the x-ray scattering long period is representative of an average crystallization temperature (Morin '082, section [0022]). As such, it is argued that the presently claimed long period is inherent to the Morin '082 invention. Support for said presumption is found in the use of similar materials (i.e., polypropylene tape yarns having a nucleator agent as recited) used to produce the fabric. The burden is upon applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the

Art Unit: 1771

alternative, the claimed long period would obviously have been provided by the process disclosed by Morin. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 1-10 are rejected.

23. Claims 1-10 are rejected under 35 USC 102(e) as being anticipated by, or in the alternative under 35 USC 103(a) as being obvious over US 2003/0127768 (Application No. 10/027,626) issued to Morin et al.

Morin '768 discloses polypropylene tape fibers having a nucleator agent therein (Morin '768, abstract). The nucleating agent is present in an amount of at least 10 ppm to at most about 2000 ppm (Morin '768, sections [0009] and [0010]). Note this teaching anticipates applicant's claim limitation since an amount of 2001 or even 2010 ppm falls within Morin's teaching of "about 2000 ppm" and within applicant's "in excess of 2000 ppm." Said nucleating agents include those claimed by applicant (Morin '768, section [0015]). The fiber may be used to make a woven carpet backing (Morin '768, sections [0030] and [0032]).

Thus, Morin '768 clearly teaches the limitations of claims 1-10 with the exception of the x-ray scattering long period. However, Morin '768 does teach that the crystallization properties due to the presence of the nucleating agent can be measured by x-ray scattering. Specifically, the x-ray scattering long period is representative of an average crystallization temperature (Morin '768, section [0022]). As such, it is argued that the presently claimed long period is inherent to the Morin '768 invention. Support for said presumption is found in the use of similar materials (i.e., polypropylene tape yarns having a nucleator agent as recited) used to produce the fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the

Art Unit: 1771

alternative, the claimed long period would obviously have been provided by the process disclosed by Morin. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 1-10 are rejected.

Conclusion

24. The art made of record and not relied upon is considered pertinent to applicant's disclosure.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cj
September 19, 2005

CHERYL A. JUSKA
PRIMARY EXAMINER